

0400 0420 #2

ENTERED*see page 5*

OICE

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/10/056,790

DATE: 02/15/2002
 TIME: 13:54:10

Input Set : A:\RRPCIP2002.txt
 Output Set: N:\CRF3\02152002\J056790.raw

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3 <110> APPLICANT: EXELIXIS, INC.
5 <120> TITLE OF INVENTION: RRP SEQUENCES AND KNOCKOUT MICE AND USES THEREOF
7 <130> FILE REFERENCE: RRPCIP2002
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/056,790
C--> 9 <141> CURRENT FILING DATE: 2002-01-23
9 <150> PRIOR APPLICATION NUMBER: US 09/908,419
10 <151> PRIOR FILING DATE: 2001-07-18
12 <150> PRIOR APPLICATION NUMBER: US 60/219,289
13 <151> PRIOR FILING DATE: 2000-07-19
15 <150> PRIOR APPLICATION NUMBER: US 60/277,487
16 <151> PRIOR FILING DATE: 2001-03-21
18 <150> PRIOR APPLICATION NUMBER: US 60/277,471
19 <151> PRIOR FILING DATE: 2001-03-21
21 <150> PRIOR APPLICATION NUMBER: US 60/304,863
22 <151> PRIOR FILING DATE: 2001-07-12
24 <150> PRIOR APPLICATION NUMBER: US 60/296,076
25 <151> PRIOR FILING DATE: 2001-06-05
27 <150> PRIOR APPLICATION NUMBER: US 60/305,017
28 <151> PRIOR FILING DATE: 2001-07-12
30 <150> PRIOR APPLICATION NUMBER: US 60/328,605
31 <151> PRIOR FILING DATE: 2001-10-10
33 <150> PRIOR APPLICATION NUMBER: US 60/328,491
34 <151> PRIOR FILING DATE: 2001-10-10
36 <160> NUMBER OF SEQ ID NOS: 70
38 <170> SOFTWARE: PatentIn version 3.1
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41 <211> LENGTH: 1559
42 <212> TYPE: DNA
43 <213> ORGANISM: Homo sapiens
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50 cccaggaac agacaggcac ggggcccttg tcccaaaagt gctgggagcc tgagcctgat      180
52 gctcccagcc agcctggccc agccctttgg tccagggggtc gggcccgac tcaggccttg      240
54 gctggcggct cctcactgca gcagctggac cccgagaaca caggcttcat cggtgcggac      300
56 accttactg gcctggtgca cagccatgag ctgcccctgg acccggccaa gctggacatg      360
58 ctggtggccc tggctcagag caacgagcag ggccagggtct gctaccagga gctggtggac      420
60 ctgatcagca gcaagcgctc cagcagtttc aagcgggcca ttgctaacgg acagcgggca      480
62 ctgccccggg acggggccgct ggatgagcca ggcctagggtg tctacaagcg gtttgtgcgt      540
64 tacgtggcct acgagatcct gccttgtgag gtggaccgcc gctggtactt ctaccgtcac      600
66 cgcagctgcc cccccccgct gttcatggcc tcggtcactc ttgccagat catcgtgttc      660
68 ctgtgttacg gggcccgct caacaagtgg gtgctgcaga cctaccaccc cgagtacatg      720
70 aagagccccc ttgtgtacca ccccgggcac cgtgcccgcg cctggcgctt cctcacctac      780

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74 ggggtgcccc tggagatggt gcacggcctg ctccgcatca gcctgctcta cctggcaggc 900
76 gtgctggcag gctccctaac cgtctccatc accgacatgc gggccccggt ggtgggaggc 960
78 tccggcgggg tctacgcctt gtgctcggca cacctggcca acgttgatcat gaactgggct 1020
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84 cccagcttca tggcgcacct ggcaggcgcg gtggtggggg tgagcatggg cctgaccatc 1200
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92 atgtggtggc cgcccaccag gggccttcac gtctgccctt tgtgaacgga cgtctcaggc 1440
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99 <210> SEQ ID NO: 2

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100 <211> LENGTH: 438

101 <212> TYPE: PRT

102 <213> ORGANISM: Homo sapiens

104 <400> SEQUENCE: 2

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110 Asp Pro Gly Thr Ser Ala Leu Pro Ala Pro Gly Ile Lys Gln Gly Pro
111 20 25 30
114 Arg Glu Gln Thr Gly Thr Gly Pro Leu Ser Gln Lys Cys Trp Glu Pro
115 35 40 45
118 Glu Pro Asp Ala Pro Ser Gln Pro Gly Pro Ala Leu Trp Ser Arg Gly
119 50 55 60
122 Arg Ala Arg Thr Gln Ala Leu Ala Gly Gly Ser Ser Leu Gln Gln Leu
123 65 70 75 80
126 Asp Pro Glu Asn Thr Gly Phe Ile Gly Ala Asp Thr Phe Thr Gly Leu
127 85 90 95
130 Val His Ser His Glu Leu Pro Leu Asp Pro Ala Lys Leu Asp Met Leu
131 100 105 110
134 Val Ala Leu Ala Gln Ser Asn Glu Gln Gly Gln Val Cys Tyr Gln Glu
135 115 120 125
138 Leu Val Asp Leu Ile Ser Ser Lys Arg Ser Ser Ser Phe Lys Arg Ala
139 130 135 140
142 Ile Ala Asn Gly Gln Arg Ala Leu Pro Arg Asp Gly Pro Leu Asp Glu
143 145 150 155 160
146 Pro Gly Leu Gly Val Tyr Lys Arg Phe Val Arg Tyr Val Ala Tyr Glu
147 165 170 175
150 Ile Leu Pro Cys Glu Val Asp Arg Arg Trp Tyr Phe Tyr Arg His Arg
151 180 185 190
154 Ser Cys Pro Pro Pro Val Phe Met Ala Ser Val Thr Leu Ala Gln Ile
155 195 200 205
158 Ile Val Phe Leu Cys Tyr Gly Ala Arg Leu Asn Lys Trp Val Leu Gln
159 210 215 220
162 Thr Tyr His Pro Glu Tyr Met Lys Ser Pro Leu Val Tyr His Pro Gly
163 225 230 235 240
166 His Arg Ala Arg Ala Trp Arg Phe Leu Thr Tyr Met Phe Met His Val

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171		260		265		270	
174	Val Pro Leu Glu Met Val His Gly Leu Leu Arg Ile Ser Leu Leu Tyr						
175		275		280		285	
178	Leu Ala Gly Val Leu Ala Gly Ser Leu Thr Val Ser Ile Thr Asp Met						
179		290		295		300	
182	Arg Ala Pro Val Val Gly Gly Ser Gly Gly Val Tyr Ala Leu Cys Ser						
183	305		310		315		320
186	Ala His Leu Ala Asn Val Val Met Asn Trp Ala Gly Met Arg Cys Pro						
187		325		330		335	
190	Tyr Lys Leu Leu Arg Met Val Leu Ala Leu Val Cys Met Ser Ser Glu						
191		340		345		350	
194	Val Gly Arg Ala Val Trp Leu Arg Phe Ser Pro Pro Leu Pro Ala Ser						
195		355		360		365	
198	Gly Pro Gln Pro Ser Phe Met Ala His Leu Ala Gly Ala Val Val Gly						
199		370		375		380	
202	Val Ser Met Gly Leu Thr Ile Leu Arg Ser Tyr Glu Glu Arg Leu Arg						
203	385		390		395		400
206	Asp Gln Cys Gly Trp Trp Val Val Leu Leu Ala Tyr Gly Thr Phe Leu						
207		405		410		415	
210	Leu Phe Ala Val Phe Trp Asn Val Phe Ala Tyr Asp Leu Leu Gly Ala						
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214	His Ile Pro Pro Pro Pro						
215		435					
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219	<211> LENGTH: 1224						
220	<212> TYPE: DNA						
221	<213> ORGANISM: Homo sapiens						
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226	ggaaaggcct tggaagcagc tegtgtgcgcc agacagccca gggagagcgc gcagcctgag	120					
228	gacctagggc cacctgctgt tccctgggat tcatgtcctt ctggggagga gggaggacc	180					
230	aggacaatgg ctgctgttca tgatctggag atggagagca tgaatctgaa tatggggaga	240					
232	gagatgaaag aagagctgga ggaagaggag aaaatgagag aggatggggg aggtaaagat	300					
234	cgggccaaga gtaaaaaggt ccacaggatt gtctcaaaat ggatgctgcc cgaaaagtcc	360					
236	cgaggaacat acttggagag agctaactgc ttccgcctc ccgtgttcat catctccatc	420					
238	agcctggccg agctggcagt gtttatttac tatgtgtgtt ggaagcctca gaaacagtgg	480					
240	atcacgttgg acacaggcat cttggagagt ccctttatct acagtcttga gaagaggag	540					
242	gaagcctgga ggtttatctc atacatgctg gtacatgctg gaggttcagca catcttgggg	600					
244	aatctttgta tgcagcttgt tttgggtatt cccttggaaa tgggtccaaa aggcctccgt	660					
246	gtggggctgg tgtacctggc aggagtgtt gcagggtccc ttgccagctc catctttgac	720					
248	ccactcagat atcttgtggg agcttcagga ggagtctatg ctctgatggg aggcattttt	780					
250	atgaatgttc tgggtgaattt tcaagaaatg attcctgcct ttggaatttt cagactgctg	840					
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256	tccattggct acacgggtgt tagctgcttt gataaagcac tgctgaaaga tccaaggttt	1020					
258	tggatagcaa ttgctgcata ttttagcttgt gtcttatttg ctgtgttttt caacattttc	1080					
260	ctatctccag caaactgacc tgcccctatt gtaagtcaat taataaaaag agccatctgg	1140					

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262 aggaaataaaa aaaaaaagga agactctatg aagaaacaga gaagtctcag aaaaggctaa 1200
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268 <211> LENGTH: 303
269 <212> TYPE: PRT
270 <213> ORGANISM: Homo sapiens
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279 20 25 30
282 Asp Gly Gly Lys Asp Arg Ala Lys Ser Lys Lys Val His Arg Ile
283 35 40 45
286 Val Ser Lys Trp Met Leu Pro Glu Lys Ser Arg Gly Thr Tyr Leu Glu
287 50 55 60
290 Arg Ala Asn Cys Phe Pro Pro Pro Val Phe Ile Ile Ser Ile Ser Leu
291 65 70 75 80
294 Ala Glu Leu Ala Val Phe Ile Tyr Tyr Ala Val Trp Lys Pro Gln Lys
295 85 90 95
298 Gln Trp Ile Thr Leu Asp Thr Gly Ile Leu Glu Ser Pro Phe Ile Tyr
299 100 105 110
302 Ser Pro Glu Lys Arg Glu Glu Ala Trp Arg Phe Ile Ser Tyr Met Leu
303 115 120 125
306 Val His Ala Gly Val Gln His Ile Leu Gly Asn Leu Cys Met Gln Leu
307 130 135 140
310 Val Leu Gly Ile Pro Leu Glu Met Val His Lys Gly Leu Arg Val Gly
311 145 150 155 160
314 Leu Val Tyr Leu Ala Gly Val Ile Ala Gly Ser Leu Ala Ser Ser Ile
315 165 170 175
318 Phe Asp Pro Leu Arg Tyr Leu Val Gly Ala Ser Gly Gly Val Tyr Ala
319 180 185 190
322 Leu Met Gly Gly Tyr Phe Met Asn Val Leu Val Asn Phe Gln Glu Met
323 195 200 205
326 Ile Pro Ala Phe Gly Ile Phe Arg Leu Leu Ile Ile Ile Leu Ile Ile
327 210 215 220
330 Val Leu Asp Met Gly Phe Ala Leu Tyr Arg Arg Phe Phe Val Pro Glu
331 225 230 235 240
334 Asp Gly Ser Pro Val Ser Phe Ala Ala His Ile Ala Gly Gly Phe Ala
335 245 250 255
338 Gly Met Ser Ile Gly Tyr Thr Val Phe Ser Cys Phe Asp Lys Ala Leu
339 260 265 270
342 Leu Lys Asp Pro Arg Phe Trp Ile Ala Ile Ala Ala Tyr Leu Ala Cys
343 275 280 285
346 Val Leu Phe Ala Val Phe Phe Asn Ile Phe Leu Ser Pro Ala Asn
347 290 295 300
350 <210> SEQ ID NO: 5
351 <211> LENGTH: 1376
352 <212> TYPE: DNA
353 <213> ORGANISM: Homo sapiens

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TIME: 13:54:10

Input Set : A:\RRPCIP2002.txt

Output Set: N:\CRF3\02152002\J056790.raw

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360 ggggataagt tgtgataccg acccgcgagg cgccgcggtc caaggaggag gcaaaagcag      180
362 acagacatca gtgtgggctg gagggcccaga ggtctggaca gaacagaggg ttccgtgaga      240
364 acaggccatg gctgagtttg accctgggaa cacaggctac attagcacag gcaagtcccg      300
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370 caacaagcgt tccaacagct tccgccaaagc catcctgcag ggcaaccgca ggctaagcag      480
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382 gcatgcaggg atagaacacc tgggactcaa tgtggtgctg cagctgctgg tgggggtggc      840
384 cctggagatg gtgcatggag ccaccgaat tgggcttgct tacgtggccg gtgttgtggc      900
386 agggtccttg gcagtgtctg tggctgacat gaccgctcca gtcgtgggct cttctggagg      960
388 ggtgtatgct ctgcgtctctg cccatctggc caacattgtc atgaactggg caggcatgaa     1020
390 gtgccagttc aagctgctgc ggatggctgt ggcccttata tgtatgagca tggagtttgg     1080
392 gcgggcccgtg tggctccgct tccaccgcgc ggccctatccc ccgtgccctc acccaagctt     1140
394 tgtggcgcac ttgggtggcg tggccgtggg catcaccttg ggcggtggtg tctgaggaa      1200
396 ctacgagcag aggtccagg accagtcact gtggtggatt tttgtggcca tgtacaccgt      1260
398 ctctgtgctg ttcgtgtctt tctggaacat ctttgcttac accctgctgg acttaaagct      1320
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403 <210> SEQ ID NO: 6

404 <211> LENGTH: 362

405 <212> TYPE: PRT

406 <213> ORGANISM: Homo sapiens

408 <400> SEQUENCE: 6

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415          20          25          30
418 Arg Glu Val Leu Leu Ala Leu Ala Asp Ser His Ala Asp Gly Gln Ile
419          35          40          45
422 Gly Tyr Gln Asp Phe Val Ser Leu Val Ser Asn Lys Arg Ser Asn Ser
423          50          55          60
426 Phe Arg Gln Ala Ile Leu Gln Gly Asn Arg Arg Leu Ser Ser Lys Ala
427 65          70          75          80
430 Leu Leu Glu Glu Lys Gly Leu Ser Leu Ser Gln Arg Leu Ile Arg His
431          85          90          95
434 Val Ala Tyr Glu Thr Leu Pro Arg Glu Ile Asp Arg Lys Trp Tyr Tyr
435          100         105         110
438 Asp Ser Tyr Thr Cys Cys Pro Pro Pro Trp Phe Met Ile Thr Val Thr
439          115         120         125
442 Leu Leu Glu Val Ala Phe Phe Leu Tyr Asn Gly Val Ser Leu Gly Gln
443          130         135         140
446 Phe Val Leu Gln Val Thr His Pro Arg Tyr Leu Lys Asn Ser Leu Val
447 145         150         155         160

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Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY

DATE: 02/15/2002

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Input Set : A:\RRPCIP2002.txt

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L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:1742 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:1790 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:1953 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30
L:1955 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30
L:1957 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30
L:4704 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47